

CLAIM AMENDMENTS

Claim 1 (previously presented):

A woodworking machine having a cutting region for cutting workpieces, comprising:

a movable cutting tool for cutting workpieces in the cutting region;

a detection system adapted to detect contact between a person and the cutting tool; and

a reaction system associated with the detection system and the cutting tool, where the reaction system is configured to retract the cutting tool at least partially away from the cutting region upon detection of contact by the detection system.

Claims 2-4 (canceled).

Claim 5 (previously presented):

The machine of claim 1, where the reaction system includes a brake mechanism configured to stop the rotation of the blade upon detection of contact by the detection system.

Claims 6-18 (canceled).

Claim 19 (previously presented):

A table saw having a cutting region for cutting workpieces, the table saw comprising:

- a circular blade for cutting workpieces in the cutting region;
- an arbor to support the blade;
- an arbor block to support the arbor;
- a pivot pin to pivotally support the arbor block;
- a rack gear associated with the arbor block;
- a worm gear to engage the rack gear;
- a shaft associated with the worm gear and configured to turn the worm gear to move the rack gear and arbor block;
- a detection system adapted to detect a dangerous condition between a person and the blade; and
- a reaction system associated with the detection system and the blade, where the reaction system is configured to retract the blade at least partially away from the cutting region upon detection of the dangerous condition by the detection system; and
- a release mechanism adapted to hold the worm gear in place relative to the shaft during normal operation of the saw, and further adapted to release the worm gear relative to the shaft upon detection of the dangerous condition by the detection system, where the blade is free to retract when the worm gear is released.

Claim 20 (previously presented):

The table saw of claim 19, where the release mechanism includes a channel in the worm gear, a shoulder on the shaft, and a clip positioned in the channel in the worm gear to engage the shoulder on the shaft.

Claim 21 (previously presented):

A woodworking machine having a cutting region for cutting workpieces, woodworking machine comprising:

a circular blade for cutting workpieces in the cutting region;

a detection system adapted to detect a dangerous condition between a person and the blade; and

a reaction system associated with the detection system and the blade, where the reaction system is configured to retract the blade at least partially away from the cutting region upon detection of the dangerous condition by the detection system;

where the woodworking machine further comprises an arbor to support the blade, and where the reaction system includes a compressible bushing positioned between the arbor and the blade and configured to allow the blade to retract due to compression of the bushing.

Claim 22 (previously presented):

A woodworking machine having a cutting region for cutting workpieces, the woodworking machine comprising:

a movable cutting tool for cutting workpieces in the cutting region;

a detection system adapted to detect a dangerous condition between a person and the cutting tool; and

a reaction system associated with the detection system and the cutting tool, where the reaction system is configured to retract the cutting tool at least partially away from the cutting region upon detection of the dangerous condition by the detection system;

where the reaction system includes a spring to push the cutting tool at least partially away from the cutting region.

Claim 23 (previously presented):

The woodworking machine of claim 22, where the reaction system further includes a segment gear and an arbor block releasably linked together, where the arbor block supports the cutting tool, and where the spring is configured to push the arbor block away from the segment gear to cause the cutting tool to retract upon detection of contact by the detection system.

Claim 24 (previously presented):

A band saw having a cutting region for cutting workpieces, the band saw comprising:

a band blade for cutting workpieces in the cutting region;

a detection system adapted to detect a dangerous condition between a person and the blade;

a reaction system associated with the detection system and the blade, where the reaction system is configured to retract the blade at least partially away from the cutting region upon detection of the dangerous condition by the detection system; and

a roller positioned adjacent the blade and configured to retract the blade by pushing against the blade upon detection of the dangerous condition by the detection system.

Claims 25-39 (cancelled).

Claim 40 (withdrawn):

The woodworking machine of claim 1 further comprising a stop to limit the retraction of the cutting tool.

Claim 41 (withdrawn):

The woodworking machine of claim 40 where the stop includes an impact absorbing material.